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(54) Title: PERIVASCULAR MESENCHYMAL PRECURSOR CELL INDUCED BLOOD VESSEL FORMATION

(57) Abstract: Mesenchymal precursors cells have been isolated from perivascular niches from a range of tissues utilising a perivascular marker. A new mesenchymal precursor cell phenotype is described characterised by the presence of the perivascular marker 3G5, and preferably also alpha smooth muscle actin together with early developmental markers such as STRO-1 and CD146/MUC18. The perivascular mesenchymal precursor cell is shown to induce neovascularisation and improvement in cardiac function. Suitable administration of preparations of the mesenchymal precursor cells are useful for treatment of cardiovascular diseases, cerebrovascular diseases and peripheral vascular diseases.